Copper Nickel Heat Resistant Alloy NC010 CuNi 6 CuNi 8 CuNi 10 CuNi 14 Heating Element Wire

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: ROHS,ISO 9001
- Model Number: CuNi6 NC010
- Minimum Order Quantity: 5~10kgs
- Price: 15~20 $/kg
- Packaging Details: Wooden box/pallet, spool wire with carton box, coil with polybag
- Delivery Time: 5-21 days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month

Product Specification

- Product Name: Copper Nickel Heat Resistant Alloy NC010 CuNi 6 CuNi 8 CuNi 10 CuNi 14 Heating Element Wire
- Material: Cu/Ni/Mn
- Nickel: 6%
- Resistivity: 0.1μΩ.m20°C
- Tensile Strength: 250 MPA
- Density: 8.9 G/cm3
- Condition: Hard / Soft
- Sureface: Bright
- Delivery Time: 7-20 Days
- Maximum Temperature: 220°C
- Melting Point: 1095°C
- TCR: 60 X10-6/C
- EMF Vs Cu: -18 UV/C
- Elongation: 15-25%

More Images

Product Description

Introduction:

CUNI 6 wire is a type of copper-nickel alloy wire with a specific composition. It contains approximately 94% copper and 6% nickel, along with trace amounts of other elements. This alloy is known for its excellent resistance to corrosion, particularly in marine environments, and it also exhibits good thermal conductivity. Additionally, CUNI 6 wire is highly ductile, making it easy to form and fabricate into various shapes.
CUNI 6 wire is commonly used in applications such as marine and offshore systems, where its corrosion resistance and other properties are highly valued. It is also utilized in heat exchangers, condensers, and other industrial and commercial applications where durability and resistance to corrosion are essential.

Application:

Marine and offshore systems: CUNI 6 wire is commonly used in marine environments due to its excellent resistance to seawater corrosion. It is employed in applications such as seawater piping, heat exchangers, and condensers on ships, offshore platforms, and other marine structures.
Heat exchangers: The good thermal conductivity and corrosion resistance of CUNI 6 wire make it suitable for use in heat exchanger systems, including those used in power plants, chemical processing, and industrial processes.
Desalination plants: Due to its corrosion resistance and durability, CUNI 6 wire is utilized in desalination plants for components such as evaporators, condensers, and piping systems.
Offshore oil and gas platforms: The corrosion resistance and durability of CUNI 6 wire make it suitable for use in offshore oil and gas platforms, including piping systems and other critical components.
Chemical processing: CUNI 6 wire is employed in various chemical processing applications where resistance to corrosive chemicals and solutions is essential.

Advantage:

Superior corrosion resistance: CUNI 6 wire provides exceptional resistance to corrosion, particularly in marine environments and other settings where exposure to seawater and corrosive elements is a concern. This sets it apart from some other CuNi alloys that may have lower corrosion resistance.
Thermal conductivity: CUNI 6 wire exhibits good thermal conductivity, allowing efficient heat transfer. This property is advantageous compared to certain CuNi alloys with lower thermal conductivity.
Ductility and workability: CUNI 6 wire is highly ductile and can be easily formed and fabricated into various shapes. Its malleability makes it suitable for a wide range of manufacturing processes and applications, distinguishing it from other CuNi alloys that may be less malleable.
Resistance to biofouling: In marine applications, CUNI 6 wire's resistance to biofouling, the accumulation of microorganisms and marine life on submerged surfaces, can be superior to that of some other CuNi alloys.
It's important to note that the specific advantages of CUNI 6 wire over other CuNi alloys may vary depending on the particular application and environmental conditions. Different CuNi alloys are designed to offer a range of properties to meet the requirements of diverse applications.

Parameter:

Main Chemical composition (%)

NC010 CuNi6	Copper	Nickel	Manganese
Chemical	balance	6%	1~1.5%

Physical Parameters:

Type	Resistivity (μΩ.m2 0°C)	Max working temperature (°C)	Tensile strength (Mpa)	Melting point (°C)	Density (g/cm)	TCR (x10-6/°C) (20~600°C)	EMF vs Cu uV/°C (0~100°C)	Elongation (%)
CuNi6	0.1	220	250	1095	8.9	60	-18	20~25%

Type of product:

Type	Size(mm)		others
Round wire	0.1~8mm		Customized
Flat ribbon wire	W-0.5~5mm	T-0.1~3mm	
Strip/foil	W-6~250mm	T-0.1~3mm	
Rod	8~200mm		

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